

ABSTRACT

The present invention relates to a crystal oscillator circuit in which the output level is maintained to prevent changes in oscillation frequency due to variations in power voltage. This crystal oscillator circuit comprises a resonance circuit formed of a crystal oscillator
5 (which acts as an inductor component) and dividing capacitors, an oscillation amplifier formed of ECL circuitry driven by a power voltage connected to the resonance circuit, and a pull-down resistor between an output terminal of the ECL circuit and ground. The pull-down resistor acts as serially-connected dividing resistors and also a bias capacitor is provided between a connection point between those dividing resistors and ground. The present
10 invention also relates to a frequency-switching oscillator having a simple circuit design and a small number of components. This frequency-switching oscillator enables a configuration in which an oscillation amplifier that is a two input, two output type of ECL circuit having mutually inverted signals is connected to a resonance circuit formed of a crystal oscillator and dividing capacitors; a first resonance circuit provided with a first electronic switch is
15 connected between one pair of input-output terminals for mutually inverted signals of the ECL circuit; a second resonance circuit is connected between another pair of input-output terminals for mutually inverted signals of the ECL circuit; and the resonance frequencies of the first and second resonance circuits are different and also the first and second electronic switches are switched to select one of the resonance circuits.